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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,862	03/23/2005	Shiv Kumar	PB0371	1501

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GE HEALTHCARE BIO-SCIENCES CORP.  
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EXAMINER

SOLOLA, TAOFTQ A

ART UNIT

PAPER NUMBER

1625

MAIL DATE

DELIVERY MODE

02/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/528,862

**Applicant(s)**

KUMAR ET AL.

**Examiner**

Taofiq A. Solola

**Art Unit**

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 21 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 13-29 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 13-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1625

Claims 13-29 are pending in this application.

Claims 1-12 are canceled.

Claims 28-29 are drawn to non-elected invention.

***Request for Continued Examination***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.117(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/21/08 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al., US 5,863,727, in view of, Burdette et al., J. Ame. Chem. Soc. (2001) Vol 123, Pages 78341-7841.

Applicant claims fluorescein dyes of formula II having linkers to acceptor dyes. The acceptor dyes are xanthine, rhodamine and cyanine dyes.

***Determination of the scope and content of the prior art (MPEP 2141.01)***

Lee et al., teach fluorescence dyes having a generic formula, which embraces the instantly claimed dyes. The dyes can be linked to xanthine, rhodamine and cyanine dyes. See col. 4, lines 20-38, col. 7, line 27, col. 8, lines 17-65 and the examples.

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

The difference between the instant invention and that of Lee et al., is that applicant claims dyes that are sub-generic of the generic formula by Lee et al.

Finding of prima facie obviousness—rational and motivation (MPEP 2142.2413)

However, Burdette et al., teach fluorescence dyes that are similar to the instantly claimed dyes useful as sensors for zinc. See examples in pages 7835-36. Therefore, the instant invention is prima facie obvious from the teachings of Lee et al., and Burdette et al. One of ordinary skill in the art would have known to claim dyes wherein R11 and R14 are amine at the same time Y1 is OH and Y2 is oxygen, from the generic teaching of Lee et al. The motivation is from the teaching of Burdette et al., that compounds having these sub-combinations have fluorescence property.

***Response to Argument***

Applicant's arguments filed 1/21/08 have been fully considered but they are not persuasive. Applicant contends that the proviso in claim 13 narrows the subject matter and therefore is not new matter, citing figures and examples in the specification. This is not persuasive because the proviso is not in the specification as filed. The figures and examples support the original claim not the new claim created by the proviso. Applicant also argues that compounds of Lee et al., are not tri-fluor ET dyes. This is not persuasive because having one, two, three, etc, dyes attached to the central structure is an obvious choice available to the preference of an artisan. Applicant further argues that the intended use of the compounds of Burdette et al., is not the same as the instant compounds. This is not persuasive because intended use is not a limitation of a compound or product. *In re Hack*, 114USPQ 161 (CCPA, 1957); *In re Craig*, 90 USPQ 33 (CCPA, 1951); *In re Brenner*, 82 USPQ 49 (CCPA, 1949).

Art Unit: 1625

Also, something old or obvious does not become new upon discovery of new properties, functions or utilities, *In re Best*, 562 F.2d 1252; 195 USPQ 430 (CCPA, 1977).

Applicant further contends that Burdette et al., teach against modification of their compounds. This is not persuasive because applicant's invention is a selection of few among many compounds by Lee et al. There is no teaching in Lee et al., against such selection. Applicant should note that the selection of "some" among many is *prima facie* obvious, *In re Lemin*, 141 USPQ 814 (1964). From the teaching of Burdette et al., it would have been obvious to try the instant selection from the compounds of Lee et al.

When there is motivation

to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under [35 USC] 103.

*KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct 1727, —, 82 USPQ2d 1385, 1397 (2007).

Alternatively, given the teachings of the prior arts, one of ordinary skill would have known to select the instant compounds from the compounds of Lee et al., at the time the invention was made. "When a work is available in one field of endeavour, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way,

Art Unit: 1625

using the technology is obvious unless its actual application is beyond his or her skill." "One of the ways in which a patent's subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims." *KSR Int. Co. v. Teleflex Inc.*, 550 U.S. ----, 82 USPQ2d 1385 (2007). Applicant further argues that Burdette et al., or Lee et al., fail to provide motivation and/or suggestion to select the instant compounds from the compounds of Lee et al. This argument is foreclosed by the recent decision in *KSR*, *supra*.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

This is RCE of applicant's earlier Application No. 10/528,862. All claims are drawn to the same invention claimed in the earlier application and have been finally rejected on the grounds and art of record. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however,

Art Unit: 1625

event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Telephone Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on (571) 272-0867. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

/Taofiq A. Solola/

Primary Examiner, 1625

February 14, 2008